



**NATIONAL TALENT SEARCH EXAMINATION
(NTSE-2017) STAGE -1
CHANDIGARH STATE : MAT**

Date: 06/11/2016

Max. Marks: 50

SOLUTIONS

Time allowed: 45 mins

1. If the following words are arranged according to the dictionary order then which will be the second word in that order?

- (1) Expound (2) Exposure (3) Expulsion (4) Expose

Ans. (2)

Sol. Exposure will come after expose

2. If it is possible to make a meaningful word from first, fifth, seventh and eleventh letters of the word ECCENTRICITY then which will be the third letter of that word? If it is possible to make more than one word then answer will be M and if the word formation is not possible then the answer will be X.

- (1) X (2) R (3) N (4) M

Ans. (3)

Sol. E, N, R, T words ; R E N T third letter = N

3. How many such letter-pairs are there in the word FRONTIER having same no. of letters left between them as they have in the series?

- (1) 2 (2) 4 (3) 1 (4) None of these

Ans. (1)

Sol. FRONTIER
first pair = ON
Second pair = NR

4. If UDOMETER is coded as DUMOTERE then how will SUBLEASE be coded?

- (1) USLBESAE (2) USLBAEES (3)USBAELES (4) None of these

Ans. (2)

Sol.
$$\begin{array}{cccccccc} \underline{U} & \underline{D} & \underline{O} & \underline{M} & \underline{E} & \underline{T} & \underline{E} & \underline{R} \\ \underline{X} & \underline{X} & \underline{X} & \underline{X} & & & & \\ \underline{D} & \underline{U} & \underline{M} & \underline{O} & \underline{T} & \underline{E} & \underline{R} & \underline{E} \end{array}$$

So SUBLEASE
USLBAEES

5. If RASCAL is coded as QZRBZK then how will SOLDER be coded?

- (1) RNMEDQ (2) RPKEDS (3) TPMEFS (4) RNKCDQ

Ans. (4)

Sol. R A S C A L
Q Z R B Z K
Subtracting one alphabet from every letter.
∴ S O L D E R
R N K C D Q

6. If Sand is coded as Brick, Brick as House, House as Temple, Temple as Palace then where do you worship ?
 (1) Palace (2) Temple (3) Brick (4) House

Ans. (1)

Sol. We worship in temple and temple is coded as palace
 So. Palace

7. In a certain code language '123' means—'Mahendra is Able', '345' means—'Sunita is unlucky', '526' means—'Mahendra was unlucky', then what is the code used for unlucky ?
 (1) 2 (2) 3 (3) 1 (4) None of these

Ans. (4)

Sol. Code for unlucky – 5

8. If '678' means—'Society Family Husbandry', '574' means—'Husbandry Health Control', '342' means—'Health Census shop', then—

(I) Which code has been used for 'Health' ?

- (1) 7 (2) 4 (3) 2 (4) None of these

Ans. (2)

Sol. Code for health – 4

9. Directions—In the following question one word is different from the rest. Find out the word which does not belong to the group—

- (1) KMNO (2) ABDE (3) PRST (4) UWXYZ

Ans. (2)

Sol. In 1st, 3rd, & 4th option

+2, +1, +1

So, 2nd option is odd me out.

10. As 'Magazine' is related to 'Editor' in the same way 'Drama' is related to what ?

- (1) Hero (2) Heroine (3) Co-actor (4) None of these

Ans. (4)

Sol. Editor edit the magazine so none of these related to drama

11. Directions—In the following question a series is given. Which one of the alternatives will replace the question-mark (?) ?

Z15A, W13C, ?, Q9G, N7I.

- (1) T12F (2) R11F (3) T11E (4) R13D

Ans. (3)

Sol.

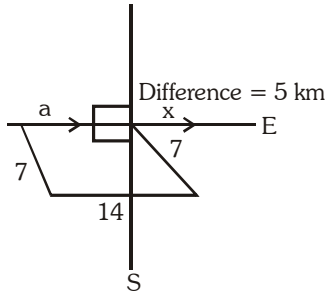
T 11 E

17. Manish goes 7 km towards South-East from his house, then he goes 14 km turning to West. After this he goes 7 km towards North West and in the end he goes 9 km towards East. How far is he from his house ?

- (1) 14 km (2) 7 km (3) 2 km (4) 5 km

Ans. (4)

Sol.

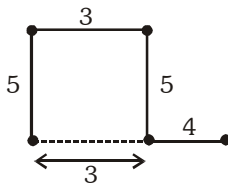


18. Ranjan goes 5 km towards North from a fixed point. Then he goes 3 km after turning to his right. After this he goes 5 km turning to his right. In the end he goes 4 km after turning to his left. How far and in what direction is he now from the fixed point ?

- (1) 4 km, West (2) 7 km, East (3) 9 km, East (4) 7 km, West

Ans. (2)

Sol.



7 km East

19. How many 3's are there in the following number series, which are preceded by an odd number but not followed by an even number ?

3425315213673182785391345235435

- (1) One (2) Two (3) Three (4) Four

Ans. (3)

Sol. 315, 731, 539

20. How many 4's are there in the following number-series which are preceded by 5 but not followed by 7 ?

23423425473243192547547234529546

- (1) One (2) Two (3) Three (4) Four

Ans. (1)

Sol. 546

21. A bus for Bombay leaves after every forty minutes from a bus stand. An enquiry clerk told a passenger that the bus had already left ten minutes ago and the next bus will leave at 10.45 a.m. At what time did the enquiry clerk give this information to the passenger ?

- (1) 10.05 a.m. (2) 9.55 a.m. (3) 10.35 a.m. (4) 10.15 a.m.

Ans. (4)

Sol. 10 : 45 – 40 minutes = 10 : 05 + 10 = 10 : 15 AM

22. How many D's are there in the following letter-series, which are preceded by K and followed by Q ?
KDRMBSKDQKRBLKDQMQDKQDK

- (1) 4 (2) 2 (3) 1 (4) 3

Ans. (2)

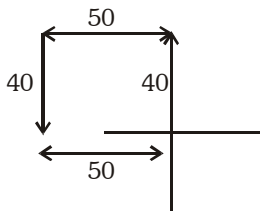
Sol.

23. Shri Prakash walked 40 metres facing towards North. From there he walked 50 metres after turning to his left. After this he walked 40 metres after turning to his left. How far and in what direction is he now from his starting point ?

- (1) 40 m, North (2) 50 m, West (3) 10 m, East (4) 10 m, West

Ans. (2)

Sol.



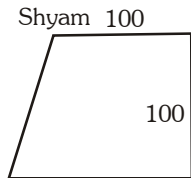
50 m, West

24. Raman walks 100 m from his house towards North. From there he goes 100 m towards West. Here is the house of Shyam. From there they both goes to the market which is in the South-West direction from Shyam's house. If the market is in the West of Raman's house then how far is the market from Raman's house ?

- (1) 100 m (2) 150 m (3) 300 m (4) None of these

Ans. (4)

Sol.



25. In each question of the following two statements are given and four conclusions I, II, III and IV are given under them. The given statements may be contrary to the universal- opinion, even then you have to assume them as true. Then decide which conclusion on the basis of given statements is logically valid.

Statements : All sages are kind.

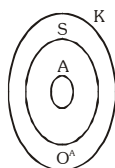
All artists are kind.

Conclusions :

- I. All sages are artists.
- II. All artists are sages.
- III. Some kind (persons) are sages.
- IV. Some kind (persons) are artists.

- (1) Only III and IV (2) Only II and III
(3) Only IV (4) None of these

Sol. Conclusin-I not follows
Conclusin-II not follows
Conclusin-III follows
Conclusin-IV follows



26. In the following each question there are two statements and two conclusions I and II there-after are given. Accept the given statements as true even if they are inconsistent with known facts and ignoring the universally known facts find out which conclusion follows logically from the given statements.

Give answer (1) if only the conclusion I follows.

Give answer (2) if only the conclusion II follows.

Give answer (3) if either the conclusion I or the II follows.

Give answer (4) if neither the conclusion I nor the II follows.

Statements : No man is crippled.

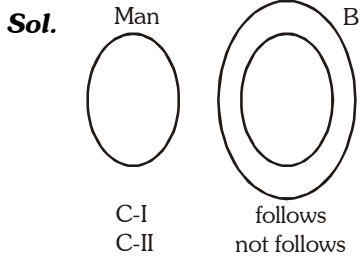
All crippled (things) are beasts.

Conclusions :

I. Some beasts are crippled.

II. Some men are beasts.

Ans. (1)



27. Pointing to a lady in the photograph Kaushal said, "She is the daughter of the daughter of the only son of my grand father." How is the lady related to Kaushal ?

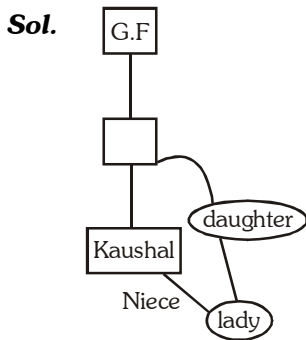
(1) Sister

(2) Maternal aunt

(3) Niece

(4) Cousin

Ans. (3)



Niece

28. If $P \times Q$ means— 'P is the brother of Q', $P \div Q$ means 'P is the son of Q' and ' $P - Q$ ' means 'P is the sister of Q', then which of the following relations will show that Q is the maternal uncle of P ?

(1) $Q \times R \div P$

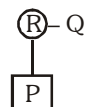
(2) $Q \div R - P$

(3) $P \times R - Q$

(4) $P \div R - Q$

Ans. (4)

Sol. As gender of Q is not mentioned, so going by best option.



29. If + means \times , \times means +, - means \div and \div means -, then—

$$16 \times 2 \div 4 + 7 - 8 = ?$$

- (1) 31 (2) $29/2$ (3) $43/2$ (4) 15

Ans. (2)

Sol. $16 + 2 - 4 \times 7 \div 8$

$$= \frac{29}{2}$$

30. If 'p' means '-', 'q' means '+', 'r' means ' \div ' and 's' means ' \times ', then—

$$16 p 4 q 5 s 8 r 2 = ?$$

- (1) - 8 (2) 32 (3) 20 (4) 12

Ans. (2)

Sol. $16 - 4 + 5 \times 8 \div 2$

$$= 12 + 20 = 32$$

Directions : (31-32) In each of the following questions one statement or advertisement is followed by two or three assumptions. On the basis of the statement choose which is/are implicit.

31. Statement—"We are feeling pleasure in extending the working hours of our office to 7.30 p.m." A general notice by a working office.

Assumptions :

I. It would have been done inspite of workers' opposition.

II. It was needed to extend the working hours.

- (1) Only I is implicit (2) Only II is implicit
(3) Either I or II is implicit (4) Neither I nor II is implicit

Ans. (2)

Sol. Only II object

32. Statement—The residents of the locality wrote a letter to the Corporation requesting to restore normalcy in the supply of drinking water immediately as the supply at present is just not adequate.

Assumptions :

I. The Corporation may not take any action on the letter.

II. The municipality has enough water to meet the demand.

III. The water supply to the area was adequate in the past.

- (1) Only II is implicit (2) Only III is implicit
(3) Only I and III are implicit (4) Only II and III are implicit

Ans. (4)

Sol. Only II & III object it

33. Directions—In the question a statement followed by two arguments is given. You have to decide which of the given statements is a strong argument and which is weak argument. Give answer (1) if only first argument is strong, give answer (2) if only second argument is strong, give answer (3) if either first or second argument is strong, give answer (4) if neither first nor second argument is strong and given answer

Statement— Should competitive examinations for selecting candidates for jobs, be of objective test only ?

Arguments :

I. Yes, the assessment of objective test is reliable.

II. No, the number of questions to be answered is always very large.

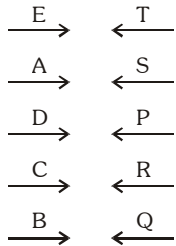
Ans. (4)

Sol. Neither I nor II is strong

Directions (34-36) : Read the following information carefully and answer the questions given below :

- (i) There are five buildings – A, B, C, D and E in a row facing towards East but not necessarily in the same order. Five other buildings – P, Q, R, S and T are in another row facing towards West. The buildings in each row are arranged in front of one another.
- (ii) B is at one of the end. There is only C between B and D. A is to the immediate left of D.
- (iii) R is just opposite to C and is between P and Q. S is to the immediate right of P.

Sol. (34-36) :



34. Which of the following pairs is at both the ends in any of the two rows ?

- (1) B and A (2) Q and S (3) P and T (4) B and E

Ans. (4)

Sol. B & E

35. A is in front of which of the following buildings ?

- (1) S (2) P (3) T (4) Q

Ans. (1)

Sol. A is in front of S

36. Which of the following buildings is in front of building E ?

- (1) S (2) R (3) T (4) None of these

Ans. (3)

Sol.

37. Directions : Out of nine cells of a square one cell is left blank, and in the rest of the cells numbers are written which follow some rule. Get the rule and find out the proper option for the blank cell (?).

4	9	20
8	5	14
10	3	?

- (1) 8 (2) 11 (3) 14 (4) 15

Ans. (2)

Sol. $4 \div 2 + 9 \times 2 = 20$

Similarly $10 \div 2 + 3 \times 2 = 11$

38.

2	1	3	2
5	H	G	2
2	K	?	9
5	4	2	1

- (1) O (2) L (3) M (4) Q

Ans. (2)

Sol. Sum of numbers

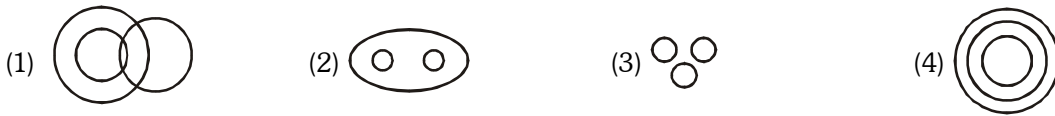
$= 9 + 2 + 1 = 12 = L$

39. OQNEDRRNQ is a code for PROFESSOR, DMSDQDC is a code for
 (1) ENTERED (2) ARRIVED (3) SLIPPED (4) RETURNED

Ans. (1)

Sol. +1 is each letter

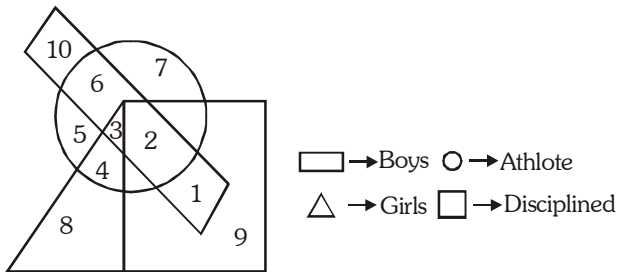
40. Which of the following diagrams indicates the best relation between Women, Mothers and Engineers ?



Ans. (1)

Sol.

41. In the following diagram the boys who are athlete and are disciplined are indicated by which number ?

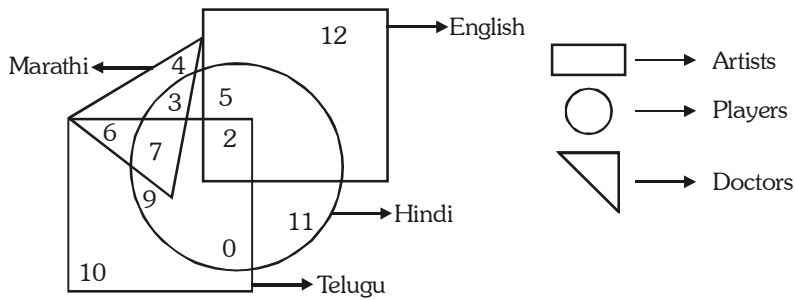


- (1) 1 (2) 2 (3) 10 (4) None of these

Ans. (2)

Sol.

Directions : In the following figure small square represents the persons who know English, triangle to those who know Marathi, big square to those who know Telugu and circle to those who know Hindi. In the different regions of the figures from 42 to 45 are given.



42. How many persons can speak English and Hindi both the languages only ?

- (1) 5 (2) 8 (3) 7 (4) 18

Ans. (1)

Sol.

43. How many persons can speak Marathi and Telugu both ?

- (1) 10 (2) 11 (3) 13 (4) 15

Ans. (3)

Sol. 6 + 7 = 13

44. How many persons can speak only English ?

- (1) 9 (2) 12 (3) 7 (4) 19

Ans. (2)

45. How many persons can speak English, Hindi and Telugu ?

- (1) 8 (2) 2 (3) 7 (4) 10

Ans. (2)

Directions :- (46 - 47) Seven students A, B, C, D, E, F, G are standing in a straight line as follows

- (1) C is standing between A and G
(2) B is standing to the left of E
(3) C is standing between C and E
(4) D and F are to the right of C

Sol. (46-47) :

46. Who is standing exactly in the middle ?

- (1) C (2) A (3) E (4) D

Ans. (1)

Sol. $\underline{B} \underline{E} \underline{G} \underline{C} \overset{D}{\underline{A}} \overset{F}{\underline{F}} \underline{D}$

C is in the middle

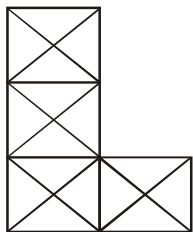
47. Who is standing to the extreme left ?

- (1) G (2) C (3) B (4) E

Ans. (3)

Sol. Extreme left = B

Directions :- Answer the questions (48-50) based upon the figure



48. How many squares are there in the given figure

- (1) 5 (2) 6 (3) 7 (4) 8

Ans. (3)

49. How many rectangles (excluding squares) are there in the given figure.

- (1) 3 (2) 5 (3) 8 (4) 13

Ans. (2)

50. How many triangles are there in the given figure.

- (1) 32 (2) 41 (3) 37 (4) 39

Ans. (4)